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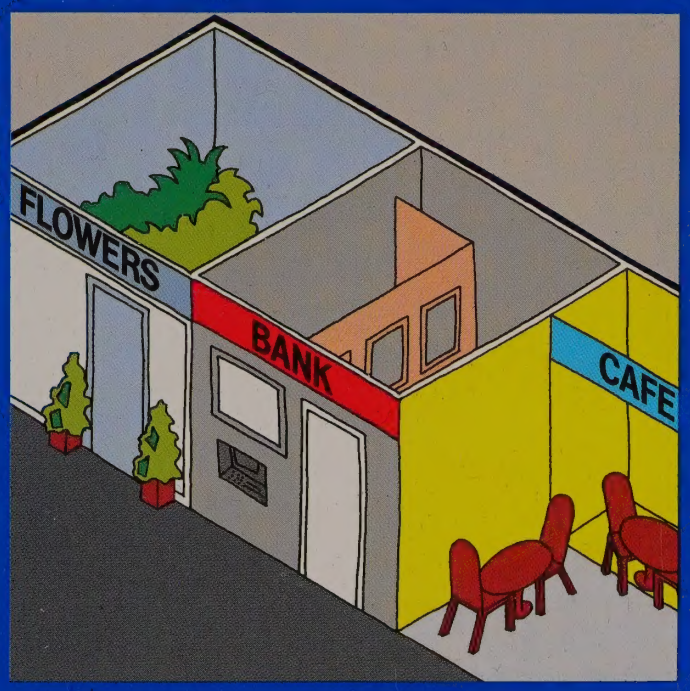
Fire Practice Note 5

Commercial enterprises on hospital premises



NHS Estates
An Executive Agency of the Department of Health

Firecode

Fire Practice Note 5

Commercial enterprises on hospital premises

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An Executive Agency of the Department of Health

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About this publication

In this Fire Practice Note (FPN), reference to General Managers means General Managers of health authorities and reference to Chief Executives means Chief Executives of NHS Trusts. References to health authorities include NHS Trusts.

Fire safety measures for the whole hospital

The primary remit of health authorities with regard to fire safety is the safety of patients, visitors and health service staff. For each particular scheme, health authorities will need to select a combination of measures to produce a fire safe design, taking the following into account:

- this Fire Practice Note;
- all statutes and guidance relevant to the scheme as a whole; in this respect Appendix 4 of this Note gives a short list of statutes and guidance to consult when formulating fire precautions schemes;
- the advice of the local fire authority and the local authority (building control);
- the advice of health authority staff (estates staff, fire prevention officers, building control advisers etc).

The Home Office has distributed FPN5 to all Chief Fire Officers and has recommended that it be used when advice is sought from local fire authorities.

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1.0 Introduction and scope

General application

1.1 This Fire Practice Note (FPN) provides general technical guidance relating to the additional fire safety precautions which may become necessary when commercial enterprises are about to be, or have been, established on hospital premises.

1.2 It is intended that the recommendations of this Note should be applied to commercial enterprise areas formed by the conversion, extension, adaptation, modernisation or refurbishment of existing locations within, or closely adjacent to, hospital buildings. In the case of new hospitals the recommendations should be considered at the initial planning stage.

1.3 The recommendations cannot take account of all the circumstances which may be found in any particular hospital, but are intended to highlight the health service aspects which need to be considered.

Exclusions

1.4 This Note excludes the following commercial enterprises:

a. those in Nucleus hospitals (see FIRECODE – 'Nucleus Fire Precautions Recommendations' section 1 for further guidance);

b. those in atria (refer to BS5588: Part 7: 'Fire Precautions – Code of Practice for Atrium Buildings' – in preparation);

c. those on premises other than hospital premises, eg health centres.

Purpose of this Note

1.5 This Note provides technical and managerial guidance to ensure that when commercial enterprises or complexes are planned or designed they will not subvert the fire safety precautions already agreed for adjacent health care areas or hospital buildings.

Management

1.6 This Note indicates the managerial and organisational arrangements necessary to ensure that any extra risks arising from commercial enterprises are taken fully into account at the onset of new schemes and upgradings. It recommends that health authorities adopt an holistic approach to setting fire safety strategies for hospital premises. In this respect it draws attention to Chapters 3, 4, 5 and 6 of Health Technical Memorandum (HTM) 81 – 'Fire Precautions in New Hospitals', which deal with statutory requirements such as those of the Fire Precautions Act and the Building Regulations. Fire separation requirements between commercial fire risk areas and hospital high life risk areas, consultation procedures and the need for fire certificates are also covered.

1.7 A considerable number and variety of schemes have been introduced by health authorities as income generation initiatives. General guidance about such schemes was issued by the Department of Health's Income Generation Unit in March 1989, titled 'A Guide to Local Initiative'. Clearly it is not possible in this Note to recommend fire safety precautions suitable for every scheme in all situations and circumstances. The necessity for fire precautions, and their extent, should therefore be considered in respect of each scheme individually, using expert advice as appropriate.

1.8 When judging the merits of a scheme in terms of fire precautions, it should be borne in mind that the installation of any commercial enterprise will, in general, increase the fire risk.

1.9 This Note needs to be applied in such a way that the increased fire risk with respect to any part of the patient care areas of the hospital premises is kept to the minimum possible and is reasonable in the circumstances.

Additional fire facilities

1.10 This Note requires consideration, inter alia, of the need for additional fire detection, alarm and extinguishing systems and smoke control systems beyond those normally provided for hospital premises. **Where such facilities are to be provided by parties other than the health authority, it is recommended that the extent of each party's responsibilities is clearly defined in writing or by specification.** Careful attention is recommended for ensuring proper co-ordination, interfacing and commissioning of the various fire precaution measures.

Wardens

1.11 This Note also recommends the appointment of persons, with special responsibilities, known as wardens.

Not only will they be responsible for the maintenance of fire safety precautions in commercial areas, but they will also take control of those areas in a fire emergency, to supervise and assist the evacuation of customers and staff. Such wardens should have regular contact and training with health authority specialist fire staff.

1.12 Training in fire precautions should also apply to staff of commercial enterprises. Their staff representatives should attend fire meetings called by the wardens.

Some special conditions affecting shopping complexes established on hospital premises

1.13 In the course of planning, building and fire certification procedures, health authorities and local building control/fire authorities (and others involved in the agreed levels of fire safety precautions) need to carefully consider the **differences** between shopping complexes established on hospital premises and complexes found elsewhere. The main characteristics of the former are:

a. the population within shops on hospital premises is significantly different from that in other indoor shopping complexes;

b. at least half the patients in a hospital at any one time may be sufficiently mobile to visit the commercial area (principally shops) within the hospital;

c. patients visiting the shops will have varying degrees of mobility and alertness; many will be slow moving, some may have limbs in plaster, be using walking aids or require assistance in wheelchairs.

1.14 The effect of the scale of a shopping complex, together with the expected mix of non-ambulant and semi-ambulant patients with the other shoppers, will have a bearing on the fire safety of everyone within that shopping complex (including those at work in the shops) at a time of fire emergency evacuation.

2.0 Definitions

2.1 Similar terms used in Health Technical Memorandum (HTM) 81, the Home Office Draft Guide to Fire Precautions in Hospitals and this Note, or in associated British Standard Codes of Practice – see Appendix 4 (References) – have the same meaning:

- **Cavity barrier**
  A construction provided to close a concealed space against penetration of smoke or flame, or provided to restrict the movement of smoke or flame within such a space;

- **Compartment floor**
  A fire resisting floor used in the separation of one fire compartment from another;

- **Compartment wall**
  A fire resisting wall used in the separation of one fire compartment from another;

- **Fire compartment**
  A building or part of a building, comprising one or more rooms, spaces or storeys, constructed to prevent the spread of fire to or from another part of the same building, or an adjoining building;

- **Fire door**
  A door or shutter provided for the passage of persons, air or objects which, together with its frame and furniture as installed in a building, is intended when closed, to resist the passage of fire and/or gaseous products of combustion and is capable of meeting specified performance criteria to those ends;

- **Fire load**
  Calorific energy, expressed in SI units, of the whole contents in a space, including the facings of the walls, partitions, floors and ceilings;

- **Fire resistance**
  Ability of an element of building construction, component or structure to fulfil, for a stated period of time, the required stability, fire integrity and/or thermal insulation and/or other expected duty in a standard fire resistance test;

- **Fire stop**
  A seal provided to close an imperfection of fit or design tolerance between elements or components to restrict or prevent the passage of fire and smoke;

- **High fire load areas**
  Those rooms or areas of hospitals which contain large amounts of combustible materials and thereby constitute a fire load in excess of that normally found within parts of such buildings;

- **High fire risk areas**
  Areas which due to their function and/or content are more than usually susceptible to an outbreak of fire or rapid spread of smoke or fire. (See also paragraph 4.4 of this Note);

- **High life risk areas**
  a. Areas in which persons may reside and are not all able to move unaided away from a fire; or
  b. Undivided areas in which more than 50 people normally congregate;

- **Material alteration of a building**
  As defined in the Building Regulations 1991;

- **Non-combustible**
  As defined in Department of the Environment (DoE) Approved Document B;

- **Purpose group**
  A classification of buildings according to the purpose to which it is intended to be put – as defined in DoE Approved Document B;

- **Service duct**
  An enclosure for the accommodation of building services;

- **Separated part of a building**
  A form of compartmentation in which a part of a building is separated from another part of the same building by a compartment wall. The wall runs full height of the part and is in one vertical plane – as defined in DoE Approved Document B;

- **Unprotected areas**
  In relation to a side or external wall of a building – as defined in DoE Approved Document B.

2.2 The following additional terms are defined to facilitate understanding of this Note:

- **Commercial enterprise**
  Any undertaking established on hospital premises or within part of a building forming a hospital to which persons, including members of the public, may resort for the purposes of trading or business, whether such transactions are for gain or not, and whether the undertaking forms the whole or part of a private venture or a health authority activity;

- **Dependent fire zone**
  In the case of fire, the fire compartment(s) of commercial enterprise areas coming under the control of the nominated wardens;

- **Nominated Officer (Fire)**
  The person with the responsibilities described in FIRECODE – 'Policy and Principles';
- **Warden**
  A person appointed by and responsible to the Nominated Officers (Fire) who will undertake prescribed duties leading to the effective and orderly evacuation of a dependent fire zone at a time of fire. (See paragraphs 3.4 to 3.8 of this Note.)

3.0 The organisation and management of fire precautions

Firecode

3.1 FIRECODE – 'Policy and Principles' states that the overall responsibility for fire precautions devolves on the General Manager/Chief Executive and requires the appointment of Nominated Officers (Fire). Each health authority must have for each of its premises a programme, prepared with the advice and assistance of the local fire authority, for installing and maintaining an adequate level of physical fire precautions designed to prevent the occurrence, ensure detection and warning and stop the spread of fires. Fire precautions policies and programmes must not remain static; they need to be regularly reviewed and updated to take account of changes in structure of buildings, their functions and contents and any other matters which may have a bearing on fire safety.

Policy decision to incorporate commercial enterprises

3.2 **Before** making the fundamental policy decision on whether to incorporate commercial enterprises on hospital premises, General Mangers/Chief Executives are strongly recommended to consult the local fire authority. Where a General Manager/Chief Executive adopts a policy of incorporating commercial enterprises, such development introduces a change of function and content into part of a building whose primary purpose is that of a hospital. Such changes will have a bearing on the general fire safety of the hospital as a whole.

3.3 This Note, largely directed at the safety of patients and hospital staff, gives guidance and provides recommendations for fire safety. The General Manager/ Chief Executive should have already considered, in accordance with FIRECODE, the fire safety implications of a decision to introduce commercial enterprises within the hospital, or in such a position as may affect the fire safety of the hospital.

Wardens

3.4 In keeping with the "high fire risk" category of a commercial enterprise area (see paragraph 4.4) it will be necessary to ensure

a. that any fire in the area is extinguished with speed; and

b. that an effective and orderly evacuation of all units within the dependent fire zone can be concluded speedily if the need arises.

These objectives will be achieved by the appointment of special wardens who should be alert and instantly responsive to the circumstances of the local situation. The persons selected will need to be located within the commercial enterprises and therefore should be employees appointed from the commercial units. The task of selecting, supervising, training and co-ordinating the activities of wardens will form part of the duties of the Nominated Officers (Fire).

3.5 It may be that the appointment of wardens can only be justified in the larger and/or more complex commercial enterprise schemes. This is a matter for the Nominated Officer (Fire) to decide, depending on the merits of each particular scheme and having regard to the advice of the local fire authority.

3.6 It is apparent that the variety of enterprises which may be encountered within the commercial areas of hospitals may be limited only by the ingenuity of those seeking to generate new sources of income. It is therefore not possible within the scope of this Note to visualise in advance all criteria which must be addressed by wardens in the course of their duties. The Nominated Officers (Fire) should take all necessary steps to ensure that the arrangements, procedures and duties that are agreed with wardens will be adequate to deal with foreseeable local requirements following an outbreak of fire. The fire precautions policies for commercial enterprise areas must form an element of the requirements set by FIRECODE – 'Policy and Principles'.

3.7 As a guide, it is expected that the principal tasks of wardens will involve:

a. ensuring the day-to-day maintenance of agreed fire safety precautions within the commercial area for which they are responsible and reporting any unresolved issues to the Nominated Officer (Fire) for prompt atention;

b. in a fire emergency, co-ordinating and directing the speedy and safe evacuation of the occupants of all units falling within the dependent fire zone, or if so directed for a fire in any adjacent zone;

c. attending local meetings on fire precautions matters affecting commercial areas and participating regularly in training and fire drills.

3.8 Nominated Officers (Fire) should ensure that one or more acknowledged deputies to the permanent warden are appointed to provide adequate availability at all times. Deputies must be fully conversant with their responsibilities and able to deputise at short notice.

Consultations with the fire and building control authorities

3.9 All proposals must be discussed and agreed with the local fire and building control authorities at the planning stage. No commercial enterprises on hospital premises are to be brought into use before agreement to the scheme has been obtained from these authorities. (See also paragraphs 3.22 to 3.24).

Commercialisation of existing hospital services

3.10 If, solely, commercialisation of an existing hospital service occurs (eg a hospital staffed laundry or restaurant becomes a commercially run laundry or restaurant), this should not result in increased risk, provided the management arrangements in this chapter are observed together with FIRECODE.

Exchange of information

Responsibility for design to ensure the adequacy of fire safety precautions

3.11 Before work on commercial enterprise areas is started, a **suitably qualified representative** from the health authority should be appointed to co-ordinate the design and construction of the commercial project.

Consultation and co-ordination

3.12 Absence of sufficient advance planning of commercial enterprise areas may result in wasteful delays and lead to expensive alterations at a later date. Consequently it is essential that proper consultation procedures to ensure co-ordination of work are established as soon as possible. The possibility of further development of commercial enterprises within or adjacent to the current project should be considered carefully.

3.13 It is recommended that particular attention should be paid to:

a. the briefs from the commercial clients and the health authority. Where the health authority alone is making speculative provision for commercial enterprises, appropriate professional advice should be sought;

b. the programme for the project;

c. the procedures for consultation with the planning/building control authority, the local fire authority and the health authority's District Fire Prevention Officer;

d. consultations with suppliers of special services such as fixed fire fighting equipment, fire/smoke control equipment and automatic fire detection and alarm systems;

e. a system for spatial co-ordination and for ensuring that plans, drawings and specifications reach those who need them in good time;

f. a system for defining areas of responsibility for the correct interfacing of new building services and fire precautions arrangements with existing hospital services;

g. the proper commissioning of new services with assignment of responsibilities and provisions for their continued and effective operation and maintenance;

h. the preparation of fire drawings, using the guidance in chapter 23 of Health Technical Memorandum (HTM) 81.

Supervision of progress during the development of commercial enterprise areas

Project supervision

3.14 For purposes of observing the establishment and preservation of fire safety precautions as required by this Note, the person appointed at paragraph 3.11 should ensure that as each commercial project progresses, the agreed designs, recommendations and advice from the planning/building control authority and the local fire authority are being implemented. It may be necessary to appoint local advisers with specialist experience in building services engineering and structural fire precautions to adequately fulfil this commitment.

3.15 In particular, it should be established that the criteria set by HTM 81 or by the Home Office 'Draft Guide to Fire Precautions in Hospitals' for ensuring the safety of the occupants in the high life risk areas of the hospital, are not being subverted by the development of the commercial enterprises.

Fire hazards during building operations

3.16 Buildings undergoing alteration or construction are particularly vulnerable to fire, mainly from lapses in safety precautions and carelessness by contractors undertaking processes involving naked flames.

3.17 Building and installation work should only be undertaken after specific arrangements have been made with the hospital fire prevention officer.

3.18 In occupied hospitals, heads of departments should be advised that construction or alteration work is being undertaken and that, for the duration of the work, there may be a higher than usual fire or security risk.

3.19 Additional supervision should be provided during the alteration or construction work period. The Nominated Officer (Fire) should arrange for visits to the site after work has finished each day to ensure that the contractors have left the site safe and that there are no smouldering materials.

3.20 For a more extensive treatment of this subject reference should be made to HTM 83 – 'General Fire Precautions'.

3.21 HTM 83 also recommends the use of the Department of the Environment booklet P5 – 'Standard fire precautions to be taken by contractors engaged on building and engineering works and maintenance for the DoE Property Services Agency'.

Statutory duties

3.22 Reference should be made to Appendices 1 and 2 of this Note for certain statutory duties in relation to fire and building regulations. Appendix 4 gives a short list of statutes and guidance in relation to those duties.

3.23 Because the variety of possible commercial enterprise schemes is considerable, fire precautions requirements in respect of schemes may not be limited to the statutes and guidance in Appendices 1, 2 and 4. Therefore the fire precautions requirements of the **appropriate enforcing authority** must be ascertained.

3.24 Guidance on Town and Country Planning is given in Part 2, Procedure Paper 1 of the Department of Health's Estatecode – 'Property Transactions in the NHS'.

Fire risk and public liability

3.25 The Department of Health's publication 'A Guide to Local Initiative', Appendix 2, lists various points for consideration, one of these being "indemnity against public liability, fire etc". As part of the overall risk assessment relating to the introduction and running of commercial enterprises on hospital premises, health authorities should take account of any increase in fire risk. Any increased risk should be taken into account when considering possible losses or claims, and commercial insurance of the risk should be obtained for income generation activities if and where appropriate. (See also EL(90)195 and 'Guide to Insurable Risk Management', published by the Department's Income Generation Unit.)

4.0 Technical recommendations

General

4.1 This Chapter is concerned with the relationship of commercial enterprises to hospitals and those health service safeguards which may be necessary to ensure patient safety. It does not cover the safe use of the commercial enterprise itself – see paragraphs 1.13 and 1.14 and Appendices 1 and 2 of this Note.

4.2 Hospitals have a vulnerable population whose safety should not be endangered on account of the assumed importance of a commercial enterprise in terms of income generation or service to the occupiers of the hospital.

4.3 The introduction of commercial enterprises and their effect on the hospital will need to be assessed for each project. It should be noted that the effect of the scale of a project is an important aspect of this assessment; in practice, the range of commercial enterprises will vary considerably from small scale enterprises to large schemes (such as the shopping complexes discussed in Chapter 1).

Classification of fire risk

4.4 When implementing this Note in conjunction with FIRECODE and/or the Home Office Draft Guide to Fire Precautions in Hospitals, commercial enterprises in general are to be classified as **high fire risk** areas.

4.5 Thus the use to which an individual commercial enterprise may be put can change from time to time, but this should not necessitate additional fire safety measures simply due to a change of use or occupier.

Relationship and separation of risks

4.6 To reduce life risk, one of the most important fire precaution measures is to separate the high life risk areas, both vertically and horizontally, from high fire risk areas.

4.7 In hospitals the relationship between high life risk and high fire risk areas is of fundamental importance and must be a prime factor in determining the location of commercial enterprises. This may be at odds with the commercial needs where, in the case of shops, a high profile location may be considered essential. Nevertheless, the safety of patients must take precedence and to this end commercial enterprises should not be directly related to nursing sections, nor should they be located directly off hospital streets or main communication routes – see "Hospital Streets" later in this Chapter.

4.8 The main objective of the separation (called for in paragraph 4.6) is that if any fire occurs in a commercial enterprise, it should not necessitate the evacuation of high life risk departments. The separation should also enable the fire brigade to contain and extinguish the fire.

4.9 Separation is best achieved by leaving space, both vertically and horizontally, between the life risk areas and the commercial enterprises. DoE Approved Document B gives guidance on horizontal space separation, and Health Technical Memorandum (HTM) 81 on vertical separation.

4.10 Where this is not possible, compartmentation is necessary to separate the high life risk areas from the commercial enterprises.

4.11 In general, commercial enterprises should not be located below high life risk areas.

4.12 Ideally, commercial enterprises should be grouped together in one area which should be separated from adjacent areas and not directly relating to main circulation routes or the main entrance of the hospital.

4.13 A group of commercial enterprises should be collected into a fire compartment having a minimum of one hour fire resistance, with any openings in the fire compartment kept to the minimum possible. The group of commercial enterprises should be established as a department/compartment, thus integrating the fire design with the management arrangements as recommended by HTM 81.

4.14 Where, for health care reasons, the nature of a commercial enterprise makes a close horizontal relationship necessary, as in the case of a pharmacy, then additional active/passive fire precautions may be necessary as a compensatory measure. In this respect paragraph 6.2 of HTM 81 offers useful but not necessarily exhaustive advice.

4.15 In addition to Building Regulation requirements, HTM 81 (paragraph 11.13) recommends that a calculated proportion of the roof(s) which may be situated below the level of adjoining and connected life risk areas should be designed to compartment floor standards.

4.16 Also, where opposite elevations of courtyards, lightwells and wings of the same building are wholly or partly in different compartments, then the guidance in DoE Approved Document B on space separation (ie unprotected areas) should be applied.

4.17 In existing accommodation the standard of existing compartment floors and walls will need to be carefully checked to ensure that the current standards of firestopping, dampering of services etc exist and that subsequent installation of communication and other systems have not prejudiced the fire resisting performance of the separation. Reference should be made to the principles given in Chapter 6 of HTM 81.

4.18 Change of function of a room or area can present a potential fire risk (sometimes serious) in a hospital. Mangers proposing such changes should carefully consider the principles of location and separation set out above.

Means of escape

4.19 Means of escape routes from commercial enterprises **must not** pass through any wards or patient care areas.

4.20 Means of escape routes from any wards or patient care areas **must not** pass through commercial enterprises.

4.21 Commercial enterprises **must not** be installed in wards or patient care areas.

4.22 When commercial enterprises are proposed for incorporation into a hospital they are often sited at ground (final exit) level. This chosen siting for the commercial enterprises has particular significance, because in the event of an evacuation from the hospital all the occupants need to descend to the ground (final exit) level and evacuate via that level. It is therefore vital that commercial enterprises are designed and incorporated in such a way as not to lessen the safety of the means of escape; nor must they reduce the width of escape routes, at or near the ground (final exit) level, particularly in the case of a total evacuation involving patients with varying degrees of disability.

4.23 The best means of escape from high life risk areas are those which are provided and maintained without the need to escape past any commercial enterprises. If this first preference cannot be achieved, then fire-resisting separation between the escape routes and the commercial enterprises may be acceptable but may need to be supplemented by other measures, depending on the merits of each situation. These other measures may involve consideration of additional fire detection, alarm and extinguishing systems and smoke control systems beyond those normally provided for hospital premises.

4.24 Commercial enterprises should not form part of single direction escape routes which give access to wards or patient care rooms or departments.

4.25 In all cases, detailed means of escape proposals for the whole hospital, inclusive of the commercial enterprises, should be fully discussed and agreed with the local fire and building control authorities.

Hospital streets

4.26 In accordance with HTM 81, hospital streets will have been designed to one hour (minimum) compartment standards, with the very minimum of openings into the street, in order to limit the spread of fire, smoke and toxic fumes.

4.27 Therefore entrances to commercial enterprises should not open directly on to the street. A one hour (minimum) fire compartment should be formed around the commercial enterprises with access to all the commercial enterprises via (preferably) one door opening on to the street itself ie a commercial enterprises department/ compartment off the street. A one hour (minimum) fire resisting ventilated lobby should be provided between the street and the commercial enterprises department/ compartment. Hospital street doors and doors to ventilated lobbies fitted with hold-open divices must be linked to and controlled by a suitable automatic fire detection system.

4.28 A hospital street sub-compartment should not contain entrances into high life risk departments together with access into a commercial enterprises department, because of the incompatibility of high life risk and high fire risk.

4.29 The principles which apply to hospital streets should also be applied to other main communication routes.

Commercial enterprises within the main entrance

4.30 If, (contrary to the recommendation in paragraph 4.12), commercial enterprises are incorporated into the main entrance of the hospital, the following **additional** fire precautions will be necessary:

a. separation of the main entrance hall from all other escape routes and other accommodation, both vertically and horizontally, by the required fire resisting construction (one hour minimum);

b. provision of alternative means of escape to by-pass the main entrance hall so as to give direct access from the health service escape routes (eg hospital streets/main communication routes) to other final exits.

Fire alarm and detection systems

General

4.31 The provision of effective fire alarm and detection systems in commercial enterprise areas is a vital component of the overall fire safety strategy. HTM 82 – 'Alarm and Detection Systems' provides the necessary general principles and technical guidance to enable installation of suitable systems. It should be read in conjunction with BS5839: Part 1: 1988 which forms a comprehensive code of practice on the subject.

Function of the fire alarm system

4.32 In hospitals it is undesirable to cause disruption to patient care areas for fires within commercial enterprise zones unless such fires threaten the life safety of hospital occupants. Therefore the purpose of the fire detection and alarm system in a commercial enterprise zone is to:

a. protect the commercial property;

b. initiate effective evacuation of customers and staff;

c. ensure as far as practicable with the other fire precaution measures that fire, smoke and water damage is restricted to commercial enterprise areas.

System technology

4.33 The type of system, its design, relationship and compatibility with any existing hospital fire alarm system will need to be considered carefully when planning the commercial enterprise area.

4.34 HTM 82 recommends that "addressable" systems which incorporate one or more microprocessors should now be specified in hospitals for new work or major refurbishments in preference to conventional systems. Addressable systems have demonstrated improved reliability, fewer false alarms and the ability to provide more meaningful displays of information. They should be considered for all but the smallest of the commercial complexes. The decision about choice of system must take into account its potential suitability and flexibility, in particular to cope with future changes of use within the commercial area. The facilities afforded by systems from different suppliers vary, and the design team should decide which system is most suited to the location under review.

Automatic detectors

4.35 In general, automatic detectors should be provided in commercial enterprises.

4.36 Associated store rooms should also be included, whether located in the commercial enterprise area or elsewhere; these commercial enterprise store rooms should be treated as fire hazard rooms in accordance with HTM 81 Chapter 14 and be provided with automatic detection in accordance with Table 3 of HTM 82.

4.37 Guidance on the types, suitability and siting of detectors may be obtained from Chapter 6 of HTM 82 and BS5839: Part 1.

Manual call points

4.38 The vigilance of staff in detecting a fire during hours of attendance can often pre-empt the warning given by an automatic detector. This is of particular value when commercial enterprises are located within hospitals. Manual call points should be installed to the recommendations of BS5839: Part 1, as part of the automatic system.

Fire alarm zones

4.39 Fire alarm zones should have a common boundary with the fire compartments of commercial enterprise areas. In most cases a single fire alarm zone will be sufficient but in extensive or complex locations it may be convenient to group a number of zones to form a sector. In all cases the fire alarm zones of the hospital and those of the commercial enterprises should be kept separate.

Fire alarm warnings

4.40 The fire alarm warning system should be designed to be an integral part of the hospital evacuation strategy and be so arranged as to minimise distress and disturbance to patients and staff. The alarm should be given automatically in those zones of the commercial complex at risk and suitable facilities incorporated to alert staff in adjacent patient areas of the hospital.

Provision and location of fire alarm panels

4.41 The provision and location of fire alarm panels should take into account the needs of the hospital, the fire brigade and the occupiers of the commercial units, since it is they, in conjunction with the special wardens, who will be responsible for taking pre-planned action. In some cases a suitable location may be adjacent to that for the hospital main system. In others a separate location may be appropriate. In all cases the location must be manned for 24 hours of every day. Local panels must be linked to the hospital main system, from which the arrangements for calling the fire brigade will be initiated in accordance with the recommendations of HTM 82.

User responsibilities

4.42 During the consultation process (see Chapter 3), it must be established whether the health authority or other responsible person associated with the commercial development will have control of the supervision of the fire

alarm system for purposes of maintaining its operational integrity, its modification and maintenance.

4.43 The duties to be undertaken are explained fully in Chapter 12 of HTM 82 and clause 28 of BS5839: Part 1.

Provision and segregation of mechanical, electrical, gaseous and liquid services

General

4.44 Services should be installed in accordance with the recommendations contained within HTM 81, associated FPNs, other of the Department's HTMs and relevant British Standard Codes of Practice.

4.45 The design, location and construction of the services and their accommodation spaces, (plant rooms, equipment spaces, service ducts, voids etc), should take into account fire hazards to the services from fires external to or within the accommodation spaces and the hazards to the commercial enterprise area from a major failure of any of the services.

4.46 Unless suitable precautions are taken service accommodation may become a place where fire starts and grows undetected. Service ducts etc can also provide a route for the spread of fire, smoke and toxic fumes. Bad design may lead to situations where a fire once started is difficult to extinguish. For detailed information on the subject, see BS8313: 1989 – 'Code of Practice for the Accommodation of Building Services in Ducts'. Clause 12 of BS8313 gives extensive coverage to the detection of fire and the precautions necessary to prevent its spread and the means to be provided for fire fighting.

4.47 The routing of services supplying hospital departments and those for the commercial enterprise areas need careful consideration. It will be necessary to ensure that a fire within the commercial area cannot disrupt or damage any of the services supplying hospital departments.

Such hospital services should be routed outside the fire compartment formed by the commercial areas. Only if this is not reasonably practical should they be routed through the compartment; in which case they may be accommodated within enclosures having a minimum of one hour fire resisting construction and subject to the agreement of the local fire and building control authorities.

4.48 Conversely it should not be possible for fire in the services supplying the commercial enterprise fire compartment to disrupt or damage any hospital accommodation. Similar routing or protection arrangements to those described above should be applied here also.

4.49 Drawings should be prepared preferably to a scale of 1:50 showing the location and runs of services, including those for fire detection and alarms, with the location of associated main controls, isolating valves, electrical switchgear etc, and the location of first-aid and fixed fire-fighting equipment being clearly represented. Symbols should be in accordance with the BS document relevant to the particular service. Such drawings should form an essential part of the information exchanged or referred to in paragraphs 3.12 to 3.15 of this Note.

Mechancial services

4.50 The chief concern here is with ventilation and air-conditioning systems. To meet the requirements of HTM 81, the ventilation systems for patient areas of the hospital and those for the commercial enterprise area should **not** be derived from a common source. The routing and protection of ductwork systems serving the hospital and the commercial area should be so arranged that it is not possible for the results of fire within the ductwork systems (or from break-in of fire into the ductwork systems) to cause fire to spread into the adjoining patient area or commercial accommodation.

4.51 Guidance on the fire problems of ventilation systems and the techniques for overcoming them are dealt with in BS5588: Part 9: 1989 – 'Code of Practice for Ventilation and Air-conditioning Ductwork'.

Electrical services

4.52 All electrical installations should comply with HTMs 7 and 11 (under revision as HTMs 2007 and 2011), the current edition of the IEE Wiring Regulations and HTM 81, paragraphs 15.8 to 15.12.

4.53 Electrical distribution circuits should be so arranged that faults and electrical disturbances and circuit rearrangements occurring on circuits supplying the commercial enterprise area do not affect the reliability or availability of the essential services to the adjacent hospital departments.

4.54 The degree of support given by the hospital's standby generator on failure of the normal supply will be a matter for local agreement, except that supplies necessary for emergency services within the commercial enterprise area should be considered in consultation with the local fire authority. Useful references dealing with emergency and standby lighting are the CIBSE Lighting Guide – 'Hospitals and health care buildings '(LG 2: 1989), the CIBSE Technical Memorandum TM12 – 'Emergency lighting' and BS5266: Part 1.

Gaseous services

4.55 Piped medical cases (PMG) as dealt with in HTM 22 (under revision as HTM 2022) must not appear within a commercial enterprise area. Where a commercial project is to be established along the route of an existing PMG pipe run, the run must be diverted so as to exclude it from the commercial area.

4.56 Where pipes conveying flammable gases such as town, natural and LPG are required for the commercial enterprises they should be routed so that they avoid hospital patient areas. The precautions necessary when flammable gases are run in service ducts are dealt with in BS8313: 1989.

Liquid services

4.57 Any pipes conveying flammable, oxidising, toxic or corrosive refrigerants for the commercial enterprises should be routed within the commercial area only. Those in service ducts should be dealt with in accordance with the requirements of BS8313: 1989.

Sprinklers for commercial enterprise areas

General considerations

4.58 In general, a suitable sprinkler system forming an integrated part of the fire safety precautions should be installed in commercial enterprises.

4.59 It is not possible in this Note to make detailed recommendations about the design of sprinklers for protecting commercial enterprise areas. Those responsible for setting the fire safety precautions will need to assess the risks associated with the introduction of such areas in conjunction with the local fire authority. Points to consider should include the configuration of the project, the functions of constituent units and their fire loading.

Classification of occupancies for fire hazards

4.60 Most areas of hospitals may be classified as having Light Hazard potential – as defined in BS5306: Part 2. Commercial enterprise areas will generally require a higher classification of hazard.

4.61 Classification is a skilled operation. It affects the choice of sprinkler installation and its operating parameters such that its type, size and design is appropriate to the classified level of hazard.

Rapid response sprinklers for life protection

4.62 Sprinkler systems are being used increasingly to protect life. This is in addition to their more familiar role of protecting enclosed commercial shopping complexes which have similiarities with some of the commercial enterprise areas now proposed for hospitals. The use of automatic sprinkler systems would help to prevent the spread of fire, smoke and toxic elements to adjacent patient areas and escape routes of the hospital.

4.63 Useful guidance on protecting shopping complexes may be obtained by reference to BS5588: Part 10. The design and installation of sprinkler systems, including the particular requirements for protecting life, are dealt with in BS5306: Part 2.

4.64 The importance attached to protecting life within hospital premises may mean that a significant number of commercial enterprise areas will need to be provided with fast response wet pipe sprinkler systems.

4.65 The components which form a sprinkler system should be in accordance with the relevant standards and type approved to achieve the required reliability of performance and durability. Sprinkler systems should be maintained to ensure reliable operation when required.

Planning considerations and consultation

4.66 The following guidance is relevant to the procedures recommended at paragraphs 3.11 to 3.13.

4.67 Where a sprinkler system is being considered for a commercial enterprise area within a new or existing hospital, early consultations should be arranged with:

a. the local fire authority;

b. the water authority;

c. other appropriate authorities;

d. the insurers (where appropriate);

e. representatives from the sprinkler installation industry.

4.68 At the outline planning stage, consideration should be given to any benefits that might be gained by changes to the design configuration and operational procedures proposed for the commercial enterprise area.

4.69 Account should also be taken of the possible adverse interaction between the sprinkler system and other fire protection measures and building services, particularly where they affect life safety. Examples are water spray and mist damage to automatic fire alarm systems and their detectors in adjacent areas of the hospital. Similar damage to the safe and reliable operation of nearby bed-passenger lifts, especially escape bed lifts should also be considered.

Smoke control in commercial enterprise areas

General

4.70 An uncontrolled fire in a single commercial unit could fully smokelog the whole commercial area in well under five minutes. Smoke and toxic gases could travel considerable distances both horizontally and vertically if left unchecked.

4.71 It is expected that most commercial enterprise areas established within hospitals will be contained within a single fire compartment. Compartmentation, the use of fire door assemblies incorporating adequate smoke control measures, effective fire stopping in service ducts, voids etc, will produce the simplest form of effective smoke control – see HTM 81 and the Home Office Draft Guide to Fire Precautions in Hospitals.

4.72 Where there may be the risk of hot smoky gases penetrating to patient areas, smoke control systems will be necessary. By their extraction techniques, such systems may also assist with the task of fire fighting within the commercial area.

4.73 Generally, commercial enterprise areas in hospitals will be located in thoroughfares having restricted floor to ceiling heights. A successful smoke control scheme requires a minimum clearance between head height and the base of a contained smoke layer to allow persons to move about freely beneath it while smoke is being extracted. Since suitable clearance may not be available in many cases, alternative smoke control systems should be considered. It is unacceptable to allow hot smoky gases to penetrate any area used by patients. Suitable alternative protection may be achieved, for example, by the installation of a smoke detector-actuated rapid response sprinkler system. A sprinkler installation will normally obviate the need for a smoke control scheme and present a better means for protecting life. It may be necessary to consider such a system where there is restricted headroom in a mall or in public common areas.

4.74 However, any commercial enterprise unit within the commercial enterprise area which has a floor area exceeding 1,000 square metres should be fitted with its own smoke control and extract system independent of any other unit or hospital system (see also BS5588: Part 10 'Shopping Complexes').

4.75 It is not possible within the scope of this Note to deal with all the problems of designing a successful smoke control scheme. This will normally require the services of a specialist who should undertake an investigation in consultation with the local fire and building control authorities.

Other factors for consideration

4.76 As the smoke control system is primarily designed to protect life any mechanically powered devices must be actuated via the automatic fire detection and alarm system at the first detection of smoke. Fusible links are generally slow in operation and should only be used as back-up features.

4.77 When a mechanically powered smoke extract system is brought into operation, the normal ventilation system should cease to operate, otherwise the former system will not function correctly.

4.78 Extract fans should be adequately rated to deal with the temperatures expected from the hot smoky gases. Alternatively steps should be taken to reduce the temperature of the gases before they reach the fans.

4.79 All electrical apparatus and supply cabling used in the smoke control systems should be suitably protected to withstand sustained operation.

Access and facilities for the fire service

4.80 Where commercial enterprises are to be installed in new and existing hospitals, or sited such that the fire safety of the hospital may be affected, early consultation with the local fire and building control authorities is of prime importance. The scale and nature of the commercial enterprises, when taken in conjunction with the hospital premises, will determine the design requirements. The following facilities to assist the fire brigade need to be considered:

a. vehicular access for fire appliances;

b. access for fire fighting personnel into buildings;

c. provision of fire mains within buildings;

d. adequate water supplies;

e. sprinkler (or other water extinguishing system) stop valves;

f. smoke extract control panels;

g. fire alarm panels.

Fire safety and hazard signs

4.81 All fire safety and hazard signs and notices should accord with HTM 65 – 'Signs' (under revision).

4.82 Fire safety signs and notices should be prominently displayed and highly visible; they must not be allowed to become camouflaged by commercial enterprise signs of an eye-catching or otherwise distractive character.

Emergency lighting

4.83 This should be installed within commercial enterprises in accordance with BS5266: Part 1.

Construction

4.84 Standards of fire resistance, compartmentation etc are to accord with DoE Approved Document B – 'Fire Safety'.

4.85 Solid non-combustible construction is recommended for compartmentation. Where this is not possible (for example in older existing hospitals), discussion should take place with the local fire and building control authorities to see if other fire safety compensatory features can be incorporated.

Catering enterprises

4.86 If commercial enterprise areas include catering establishments approaching the level of fire risk/fire load applicable to main kitchens of hospitals, the relevant recommendations of Fire Practice Note 4 – 'Main Kitchens' (in preparation) must be followed.

Fire fighting equipment

4.87 Places of work generally (shops etc) will require means for fighting fire under the provisions of the Fire Precautions Act 1971. The advice of the local fire authority should be sought to determine the number, type and location of this equipment. (See also Appendix 1 of this Note.)

Commercial enterprise goods

4.88 The following must be controlled to reduce fire hazards in and about hospital premises:

a. safe delivery and removal of goods;

b. safe storage of goods within the confines of commercial enterprise areas;

c. maintenance of all vehicular access routes for fire appliances at all times;

d. maintance of clear means of escape routes at all times;

e. adequate and safe provisions for the storage and removal of waste.

Appendix 1

The Fire Precautions Act 1971
(as amended by The Fire Safety and Safety of Places of Sport Act 1987)

Fire certificates

1. This Appendix describes the following;

a. the circumstances in which fire certificates are required;

b. the legal duties as regards safety pending the determination of applications for fire certificates;

c. the legal duties as regards safety in certain shops, offices and factories which do *not* require fire certificates.

2. Where commercial enterprises are premises whose use is designated under the Fire Precautions Act, a fire certificate may be required. In the case of the commercial enterprise being an activity carried out by hospital employees, the premises will be considered to be in single occupation and the fire certificate will be issued to the General Manager/Chief Executive as the occupier.

3. Where one or more commercial enterprise units are not occupied by the hospital but are held under a lease or an agreement for a lease or under a licence, the premises are in multiple occupation. The fire certificate will therefore be sent to the General Manager/Chief Executive and copies of the certificate will be issued to the occupiers.

4. Where fire certificates are required, applications must be made to the local fire authority **when the premises are first occupied**. (Consultation with the local fire authority will need to have taken place at the planning stage, as stated in paragraph 3.9 of this Note).

5. A fire certificate, issued by the local fire authority, is required for health service buildings, or parts of buildings, which are used as shops, offices or factories in which persons are employed to work and where any of the following circumstances apply:

a. if more than 20 persons are at work in the shop, office or factory;

b. if more than 10 persons are at work therein at any one time elsewhere than on the ground floor;

c. if there are two or more shop, office or factory premises in a building and the aggregate number of persons at work therein exceeds 20 or 10 elsewhere than on the ground floor.

6. It will be noted from the above that the fire certificate relates to "persons employed to work". The numerical qualifications refer to "persons at work" and this includes persons who may not be classified as employed ie self employed persons. The effect may be that with the changes in occupiers of units in complexes, the control of the fire certificate could vary, so it is **essential** that the fire authority be consulted at an early stage.

7. Also, if in the case of factory premises, explosive or highly flammable materials (other than materials of such a kind and in such a quantity that the fire authority has determined that they do not constitute a serious additional risk to persons in case of fire) are stored or used in or under the premises, a fire certificate is required.

8. Where an application is made for a fire certificate with respect to any premises, it is the duty of the occupier to ensure that, when the application is made and pending its disposal:

a. means of escape in case of fire with which the premises are provided can be safely and effectively used at all material times;

b. the means for fighting fire with which the premises are provided are maintained in efficient working order;

c. any person at work in the premises receives instruction or training in what to do in case of fire.

9. In certain cases the local fire authority may decide that, under provisions in the Fire Precautions Act, some shops, offices or factories are exempt from the requirement to have a fire certificate. Nevertheless there remains a general duty on the occupier under that Act to provide such premises with:

a. such means of escape in case of fire, and

b. such means of fighting fire

as may reasonably be required in the circumstances of the case.

10. In the case of premises in multi-occupation, the owner will be, in the event of a contravention, guilty of an offence.

Responsibility of the General Manager/ Chief Executive

11. The General Manager/Chief Executive has the overall responsibility for all fire precautions on hospital premises, including the commercial enterprises.

12. In premises requiring a fire certificate (whether manned by hospital staff or commercial enterprise staff), the local fire authority will name the General Manager/ Chief Executive as owner/occupier and issue the fire certificate to him or her; a copy of the fire certificate will be issued to each occupant of premises named within the fire certificate.

Guidance

13. The Home Office has published three guides in relation to fire precautions in existing shops, offices and factories; it has also published a guide to fire precautions in existing places of entertainment and like premises – see Appendix 4 of this Note.

Overlap of statutory control

14. Appendix 2 of this Note describes how fire safety can be subject to control by both the Fire Precautions Act and the Building Regulations and how there is some overlapping of control between these two statutes.

Appendix 2

The Building Regulations 1991

Control

1. The Building Regulations 1991 control the erection of a new building, the extension of a building and the material alteration of a building. This Appendix describes how fire safety is controlled by the Building Regulations. Since fire safety is also controlled by the Fire Precautions Act, there is some overlapping of control between these two statutes and this aspect is also outlined.

Purpose groups and uses

2. In many hospitals there may be a complex mix of uses (called "purpose groups" in the Building Regulations). It is therefore necessary to consider the possible risk that one part of a complex may have in another, and special measures to reduce this risk may be necessary. In respect of commercial enterprises, these special measures may include such items as smoke control and additional fire detection, alarm and extinguishing systems beyond those normally provided on hospital premises.

3. In general, it is considered that commercial enterprises forming part of a hospital constitute a different purpose group within that building and as such must be (in Building Regulation terms) "compartmented" from, or formed into a "separated part" from, the hospital.

Variety of commercial enterprise installations

4. When applying Building Regulations, there are various conditions which can arise and the combined effect of Building Regulation/Fire Precautions Act fire requirements can vary accordingly.

5. Some examples of the conditions in respect of commercial enterprises are:

a. installation as compartment(s) within an existing hospital;

b. installation as compartment(s) within a new hospital;

c. installation in a new separate building purpose-built solely for commercial enterprise use;

d. installation in an existing separate building altered and adapted solely for commercial enterprise use;

e. installation as a "separated part" of either a new or an existing hospital, possibly in the form of an extension.

Application of Building Regulations/Fire Precautions Act

6. PART B of Schedule 1 of the Building Regulations covers fire safety:

B1 Means of escape in case of fire

B2 Internal fire spread (linings)

B3 Internal fire spread (structure)

B4 External fire spread

B5 Access and facilities for the fire service

Means of escape in case of fire

7. Building Regulations control means of escape, including a "shop and commercial" purpose group which is defined in DOE Approved Document B. When new shops have been designed and constructed in accordance with the Regulations concerning means of escape from fire (and no material alterations have taken place), it is likely that the duty under the Fire Precautions Act concerning means of escape from fire will also be met, provided the standard required by the Regulations is being maintained effectively. Such new shops become subject to the Fire Precautions Act when they are first occupied – see Appendix 1 of this Note (paragraph 4).

Material alteration

8. The Regulations define the "material alteration" of a building. In each particular case, local authority building control should be consulted on whether they consider the installation of commercial enterprises into the existing hospital building comes within the definition.

DoE guidance

9. Part B of Schedule 1 of the Regulations must be followed for the erection of a new building, the extension of a building and the material alteration of a building. DoE has issued guidance for complying with Part B in the form of Approved Document B – 'Fire Safety'.

Appendix 3

Checklist of technical fire precautions design factors to be considered when establishing commercial enterprises on hospital premises

This checklist is not exhaustive – it is intended as an aide-memoire.

1. Assessment/Classification of fire risks/loads of commercial units.
2. Separation of life and fire risks, both vertically and horizontally in relation to health care accommodation.
3. Means of escape in case of fire.
4. Access and facilities for the fire service.
5. Routing and protection of building services.
6. Fire resisting construction, including all perforations thereto.
7. Fire properties of materials.
8. Automatic fire alarm and detection.
9. Water or other extinguishing systems.
10. Smoke control systems.
11. Fire safety and hazard signs.
12. Emergency lighting.
13. Fire fighting equipment.
14. Storage and removal of waste.

Appendix 4

References

Health authorities should ensure that they use the latest editions (together with any amendments) in relation to guidance and take account of all amendments to statutes.

Statutes

The Building Act, 1984

The Building Regulations, 1991

Factories Act, 1961

The Fire Precautions Act, 1971 (as amended by the *Fire Safety and Safety of Places of Sport Act* 1987)

Fire Precautions (Factories, Offices, Shops and Railway Premises) Order, 1989

Fire Precautions (Application for Certificate) Regulations, 1989

Health and Safety at Work etc. Act, 1974

Offices, Shops and Railway Premises Act, 1963

Guidance

British Standards Institute

BS476: (Various parts) – *Fire Tests on Building Materals & Structures*

BS4422: (Parts 1 to 8) – *Terms Associated with Fire*

BS5266: Part 1: 1988 – *Emergency Lighting*

BS5306: Part 2: 1990 – *Specification for Sprinkler Systems*

BS5499: Part 1: 1990 – *Fire Safety Signs, Notices and Graphic Symbols*

BS5588: Part 2: 1985 – *Code of Practice for Shops*

BS5588: Part 4: 1978 – *Code of Practice for Smoke Control in Protected Escape Routes using Pressurization*

BS5588: Part 9: 1989 – *Ventilation and Air Conditioning Ductwork*

BS5839 – *Fire Detection and Alarm Systems in Buildings:*

Part 1: 1988 – *Code of Practice for System Design, Installation and Servicing*

BS8313: 1989 – *Code of Practice for the Accommodation of Building Services in Ducts.*

Department of the Environment

Approved Document B – *Fire Safety*

Booklet P5 – *Standard fire precautions to be taken by contractors engaged on building and engineering works and maintenance for the DoE Property Services Agency.*

Department of Health

FIRECODE

HTM 65 – *Signs*

Hazard Notices and *Safety Action Bulletins,* relevant to fire precautions

A Guide to Local Initiative – Income Generation Unit

Estatecode

Works Guidance Index.

Home Office

Draft Guide to Fire Precautions in Hospitals

Code of Practice for Fire Precautions in Factories, Offices, Shops and Railway Premises ***not*** *required to have a Fire Certificate*

Fire Precautions Act 1971. Guide to Fire Precautions in Existing Places of Work that require a Fire Certificate – Factories, Offices, Shops and Railway Premises

Fire Safety at Work

Guide to Fire Precautions in Existing Places of Entertainment and Like Premises.

Industrial Communication Consultants

Register of Building Legislation

Register of Departmental and Advisory Documents.

Chartered Institution of Building Services Engineers

Lighting guide – *Hospitals and Health Care Buildings* (LG2: 1989)

Technical Memorandum TM 12 – Emergency Lighting.

Other Firecode Publications

(Given below are details of all documents which, together, form 'Firecode'. Information is correct at time of publication of this Fire Practice Note.)

Firecode

Policy and principles, 1987. HMSO
Directory of fire documents, 1987. HMSO
Nucleus fire precautions recommendations, 1989. HMSO
Nucleus fire evacuation strategy, 1986. DH

Health Technical Memoranda

81 Firecode: fire precautions in new hospitals, 1987. HMSO

82 Firecode: alarm and detection systems, 1989. HMSO

83 Fire safety in health care premises: general fire precautions, 1982, HMSO

84 —

85 —

86 Firecode: assessing fire risk in existing hospital wards, 1987. HMSO

87 Firecode: textiles and furniture, 1989. HMSO

88 Fire safety in health care premises: guide to fire precautions in NHS housing in the community for mentally handicapped (or mentally ill) people, 1986. HMSO

Fire Practice Notes

1 Laundries, 1987. HMSO

2 Storage of flammable liquids, 1987. HMSO

3 Escape bed lifts, 1987. HMSO

4 —

'Firecode' documents published by HMSO can be purchased from HMSO Bookshops in London (post orders to PO Box 276, SW8 5DT), Edinburgh, Belfast, Manchester, Birmingham and Bristol or through good booksellers. The 'Nucleus fire evacuation strategy' can be obtained direct from NHS Estates.

Enquiries should be addressed to:

NHS Estates
Department of Health
Room 304, Euston Tower
286, Euston Road
London NW1 3DN

Telephone 071-388 1188 Ext: 3903 (normal office hours)

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